Rice University
CEVE 499-015
Special Topics – Senior Design Architectural Support
Spring 2015

Professors Charles Penland, Phillip de Blanc, and William Canady

---

Course Scope and Structure: Provide architectural support for senior civil engineers completed their senior design project. Offered upon mutual agreement of faculty and student.

Schedule: Class meeting Thursdays, 3 p.m. to 5 p.m.

Additional individual meetings with student groups as needed.

Office Hours: By appointment.

Required Text: None.

Grade Mode: Standard Letter Grade

Ethics

All students are expected to act in an honest and ethical manner consistent with Rice University regulations and honor code.

Since some homework and exam questions could be similar to those of previous years, possessing, consulting or studying with old homeworks or exams will be considered as a serious violation of the honor code.

The consequences for acts of academic dishonesty will range from punitive grade reduction to course failure. Specifically, students should understand the definition of plagiarism. The information on plagiarism at the link below is required reading:
http://gervaseprograms.georgetown.edu/honor/system/53377.html

Rice University
CEVE 499-0015
Special Topics – Senior Design Architectural Support
Spring 2015

Professors Charles Penland, Phillip de Blanc, and William Canady

---

Course learning objectives –
Students should learn to understand the constraints and challenges posed by engineering considerations on design of structures and related development. Students should also learn how to integrate the creative aspects of architecture with the practical considerations that engineers consider when designing projects.

Expected learning outcomes (depending on student project)
Students completing the course should be able to demonstrate:

a) an understanding of the engineering considerations needed in project design;
b) an ability to analyze and interpret data;
c) an ability to meet desired needs within realistic constraints such as environmental, ethical, health and safety, practicality, and sustainability;
d) an ability to function on multidisciplinary teams (e.g., group project);
e) an ability to identify, formulate, and solve engineering/architectural problems;
f) an understanding of professional and ethical responsibility;
g) an ability to communicate effectively (e.g., class presentation, paper);
h) the broad education necessary to understand the impact of engineering/architectural solutions in a global, economic, environmental, and societal context;
i) a recognition of the need for, and an ability to engage in life-long learning;
j) a knowledge of contemporary issues; and,
k) an ability to use the techniques, skills, and modern engineering/architectural tools necessary for basic engineering/architectural practice.

CEVE 499 Senior Design Project–Syllabus

One-hour credit for RSA Students
Spring Semester 2015

Rice School of Architecture and George R. Brown School of Engineering Collaborative Team Work for RSA Students, Structural, Civil and Environmental engineers / LEARNING OUTCOME : Students learn to collaborate with Consulting engineers od the design of a real-world project

Meets Thursdays 3:00 – 5:00, Mech. Lab 254 (RSA students-minimum attendance required except for two reviews)

RSA students serve as the design architect leading a collaborative team of structural, civil and environmental consulting engineers enrolled in their Senior Design Project. The project is treated as a real-world design experience.

Wm. T. Cannady, FAIA Professor

Charles Penland. P.E., Leed AP, Visiting Lecturer

Phillip C. de Blanc, Ph.D., P.E.
Senior Consulting Engineer

Projects include:

Mixed-use projects located on Bissonnet between Greenbriar and Kirby that include retail, offices and multi-family residential building with structured parking. Emphasis is on creating an environmentally green pedestrian-oriented street and landscaped sidewalks.

Active team participation is needed
Design work will be done outside of class time (approx. 42 hours over 14 weeks)
Schematic design package to include site & floor plans, section, elevations and exterior perspective- final project will be a team-prepared PowerPoint presentation to outside professionals
Six teams need at least one fourth-year, 5th year or Graduate RSA student per
Two RSA students per team ideal. Class limited to 10 students